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ABSTRACT

The book is intended to help administrators provide leadership necessary to begin and maintain gifted and talented education programs. An initial section provides an overview of the population, the rationale for special educational provisions, a historical review of gifted and talented education, and considerations in identification, program selection, and program funding. The second section details 13 points in program development: (1) setting up a steering committee, (2) conducting needs assessment, (3) appointing a coordinator, (4) delineating a program model, (5) developing a technical assistance plan, (6) developing and implementing an identification process, (7) deciding on a curriculum development plan, (8) selecting teachers, (9) implementing the program, (10) evaluating the program, (11) using community resources, (12) structuring a counseling component, and (13) keeping the program going. Among resources listed are references for administrators and suggested identification procedures in six talent areas. (CL)

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An Administrator's Guide to the Education of Gifted and Talented Children

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An Administrator's Guide to the Education of Gifted and Talented Children

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Introduction

Perhaps the most neglected minority in today's educational system is the gifted and talented child. Although few resources are allocated for his or her advancement, gifted and talented programs *can* be begun with limited amounts of time and money.

This book has been prepared to aid administrators at a variety of levels in providing the leadership necessary to start and keep a gifted and talented education program in their school district:

Superintendents who must direct, lead, and encourage program development by selected staff, yet also deal with board of education concerns and parent outcries will find it an invaluable tool.

Curriculum directors and special education directors under whose authority gifted programs may operate will find here a framework for planning, facilitating and managing a gifted program once the initial commitment has been made.

Building principals who must supervise program implementation will find useful discussion of relevant concerns such as staff acceptance, contact time and appropriate environments.

Regardless of your administrative title, this book will prove an invaluable resource for program coordinators who have the direct responsibility for seeing that the programs operate successfully. Toward that end, this book offers insights for efficient and systematic program development.

Knowing that administrators are busy people, I have deliberately synthesized relevant information in the field of gifted education that I feel reflects such administrative concerns, and distilled it into the following pages. The book is divided into two sections: an overview and setting up a program.

Part One—
Overview

Who Are the Gifted and Talented?

There are many different perspectives on what constitutes a "gifted and talented" child. But as a practical matter most states and the federal government define gifted and talented children as "children and, whenever applicable, youth, who are identified at the pre-school, elementary, or secondary level as possessing demonstrated or potential abilities that give evidence of high performance capability in areas such as intellectual, creative, specific academic, or leadership ability, or in the performing and visual arts, and who by reason thereof, require services or activities not ordinarily provided by the school."

Using this definition for identification of the gifted and talented will encompass a minimum of three to five percent of the school population for any one area of giftedness. However, many students will overlap categories, and this will affect the total numbers of students under consideration.

There is not sufficient experience using the current broad definition to establish definitive statistics. Some suggest that two to three percent of the school population might be included under any one of the six criteria. Using 1970 census data, the *Report to Congress by the U.S. Commission of Education* estimates the following numbers would prevail:

% of Pupils	National Prevalence
1	516,000
2	1,032,000
3	1,548,000
5	2,580,000

The number of children served in any particular school district will depend upon the measures used for identification; the socio-economic level of the community; and the community's willingness to fund unique educational opportunities. Vast numbers of students who are not now receiving services commensurate with their abilities *can* be identified and assisted even if the community uses very restrictive data.

Characteristics of the Gifted and Talented

A clear delineation no longer exists in practice between the terms "gifted" and "talented". At one time, the distinction lay mainly between those individuals who had high ability in all areas and so were termed "gifted" and other individuals who had ability primarily in one area and were thus termed "talented". Today the dual term is used to apply to those children who fit the definition previously given which tends to focus on specific talent areas such as leadership, visual arts, and performing arts as well as academic areas singly and in combination. Most programs in this country tend to focus on a specific area of giftedness rather than on a truly comprehensive program that addresses all the strengths of such children.

Some of the general characteristics which set gifted and talented children apart from other children of the same are listed below. Although many of these characteristics exist to some extent in average and above average children, gifted children exhibit the characteristics to a greater degree. Depending on the type of giftedness, some characteristics will be more evident than others:

- Keen power of abstraction, willingness to examine the unusual
- Ability to abstract; conceptualize; interest in problem solving and applying concepts
- Interest in cause-effect relationships
- Early reader and frequently a voracious one
- Large vocabulary, facility in expression
- Questioning attitude, intellectual curiosity
- Power of critical thinking, skepticism, self-criticism
- Creativeness and inventiveness, liking for new ways of doing things

- Powers of concentration, long attention span
- Persistent, goal-directed behavior; intrinsic motivation
- Sensitivity, empathy for others, need for emotional support
- High energy, alertness and eagerness
- Independence in work and study, preference for individualized work
- Diversity of interests and abilities (Terman, Hollingsworth, et. al.)

There has been much debate about whether creativity and giftedness are separate phenomena. Most research supports the notion that not all gifted individuals are creative and not all creative individuals are gifted. However, it is widely recognized that there is a significant overlap between the two, witness Renzulli's new definition of giftedness which excludes those children who do not display evidence of creativity. (*Phi Delta Kappan*, November 1978).

Following is a list of the characteristics that have been associated with the recognition of creative individuals. It may prove useful for recognizing those gifted children who possess a high degree of creativity that can be encouraged and nurtured in the context of a program. Creative characteristics include:

- Independence in attitude and social behavior
- Dominance
- Introversion
- Openess to stimuli; wide interests
- Self-acceptance
- Intuitiveness
- Flexibility
- Social presence and poise
- An asocial attitude; unconcern for social norms; risk-takers
- Radicalism; rejection of external constraints
- Ability to fantasize and toy with ideas
- Aesthetic and moral commitment to work (Torrance, Taylor, Getzels and Jackson, et. al.)

Torrance sums up nicely the relationship between these characteristics and creative thinking:

> A part of the business of teaching children to think creatively is teaching them to understand and consciously to use these emotional, irrational processes and to formulate and apply criteria for evaluating alternative solutions. (Torrance, 1972).

For the highly creative child this goal is crucial to the development of an unusual potential and is therefore rightfully in the domain of gifted education.

The question of who are the gifted and talented can be handled quite well by a trip through historical research on the subject. Yet identifying this group in today's school settings may prove most difficult and require more practical definitions.

Recognizing the dichotomy of relative versus absolute standards for giftedness is an important concept in the identification of gifted students anywhere. But since identification of students always occurs in a particular context, giftedness and the need for programmatic intervention must also be judged in that context. Thus, if we accept the idea that all schools have gifted children, we must also be prepared to accept the notion of a *relative* standard, i.e., children being termed "gifted" who perform at significantly higher levels than the norm for any given school, but not significanfly higher than the norm in another school, or district. The operational definition of giftedness then will depend on the "norm" in a given educational context and the degree to which students are operating significantly above that norm. Equating giftedness with a specific I.Q. score or any other test score becomes meaningless for gifted program purposes. Instead, it is the evidence of a clear need for differentiated educational experiences that will determine how a district identifies its gifted population.

An absolute standard of giftedness, on the other hand, implies that local norms are not as important as national standards. Strict adherence to an I.Q. cutoff and achievement cutoffs are followed. The problem with the absolute standard lies in implementing programs around it as well as getting agreement around what a national standard should be. Consequently, most states and therefore most districts have followed the relative standard concept when looking for its gifted and talented population.

Why Special Programs Are Needed for Gifted and Talented Students

There are over two million school-age children in the United States who, because of their outstanding ability, are called "gifted and talented." They come from all kinds of cultural and socio-economic backgrounds. Once stereotyped as physically weak and mentally unbalanced, gifted and talented children are now generally viewed as healthy and well-adjusted. However, they differ in many ways from children with average abilities.

Education for the gifted and talented requires an understanding that their differences are both real and legitimate. Programs are planned for them, not on the basis of content which suits the majority of pupils, but on the basis of their advanced accomplishments and interests which require different content and different opportunities. Like all other students, their educational experiences must be appropriate *for them*.

An adequate program must be diverse, advanced, and complex enough to reflect their abilities. The content of such a program should provide interest and challenge, not opportunities to mark time and do "good" work. The hallmark of education for the gifted and talented is careful planning of individual opportunities for advanced learning which are suitable to exceptional minds and talents. Such education enhances development; it does not restrict or postpone. It accommodates the school to the students, rather than the reverse. In short, it recognizes the child's right to learn and advances his unique potential for self-actualization - well as society's need for outstanding contributions.

Gifted and talented youth are a unique population, differing markedly from their peers in abilities, talents, interests, and psychological maturity. They are the most versatile and complex of all human groups, and possibly the most neglected of all groups with special educational needs. Their sensitivity to others and insight into existing school conditions make them especially vulnerable, because of their ability to conceal their giftedness in standardized surroundings and to seek alternative outlets. The resultant waste is tragic. Research studies on special needs of the gifted and talented demonstrate the need for special programs: contrary to widespread belief, these students cannot ordinarily excel without assistance. The relatively few gifted students who have had the advantage of special programs have shown remarkable improvement in self-understanding, in ability to relate well to others, and in academic and creative performance (excerpted from paper by Mitchell, 1978).

Needs of Gifted Children

The needs of gifted children vary according to the characteristics of giftedness that they evidence and the degree to which they exhibit these characteristics in an educational setting. Responsible educators and research, however, both tend to support four general needs of the gifted:

- The need to move at their own rate, regardless of chronological age or grade placement;
- The need for diversity in their educational experiences, in terms of instructional strategies, materials, and types of activities;
- The need to be challenged and stimulated in an environment that allows children of similar abilities to learn from each other;

- The need for counseling around:
  a) coping with the exceptionality of being gifted
  b) decision-making
  c) school/career/life planning

Good gifted programs that offer a comprehensive approach address these needs in a systematic way. However, many programs focus on only one or two because of financial constraints.

The specific needs of gifted children relate directly to the characteristics they manifest as a group. Some of these needs cannot be met by the school alone, but only in collaborative relationship with the home and with other environmental influences. The following charts show the relationship between specific characteristics and the needs that emanate from them.

Characteristic	Need
Ability to handle abstractions	To engage in higher level thinking situations and operations
Problem-solving powers	To experiment with structured and unstructured problems, both real and hypothetical
Reading ability and related strengths	To engage in reading, discussion, and language study
Curiosity alert, eager, diversity of interest	To explore phenomena with which he/she comes in contact
Criticism	To channel evaluative judgments toward constructive ends
Creativity	To express himself/herself through a variety of forms and contexts
Concentrational powers goal directed	To participate in long-term projects and activities that are meaningful
Independence	To pursue solitary endeavors

Creativity Needs

Most of the research shows that to some degree, all children can be taught to think creatively. The extent to which this phenomenon relates to gifted education can be determined only by the nature of the population to be worked with, in conjunction with their needs.

It is conceivable that the skills of creative thinking are invaluable to all types of gifted children, i.e., whether they be talented in the arts or in academic areas. Thus it is important to look at creativity as an integral part of all areas in which a child may be gifted as opposed to treating it as a separate entity. Creative development does not occur in a vacuum, and individuals who possess high creative potential demonstrate that potential within the context of a content area. Whether we are concerned with Einstein's creative productivity in physics or Beethoven's in music, it is the knowledge and understanding of a core area that precedes one's ability to contribute originally to that area or to exhibit high creativity.

Therefore, teaching the creative process in the context of a gifted program is helpful, for it emphasizes thinking and problem-solving skills within a process model. The skills of creativity can be taught through Paul Torrance's notion of skills, i.e., fluency, flexibility, elaboration and originality, or it can be taught through a process model such as the one popularized by Sidney Parnes:

1. Brainstorming
2. Problem-finding
3. Alternative Idea-finding
4. Solution-finding

5. Plan of Action
6. Acceptance-finding

As has been demonstrated, the needs of these gifted students are real and can be met through special efforts on the part of concerned adults in and out of a formal educational context. Yet only 12 percent of the students with these needs are currently benefiting from appropriate services or programs in this country. This situation is better than the past, but is not significantly encouraging for the future.

Historical Review of Gifted and Talented Children

Early pioneers in the field of gifted education in this country such as psychologists and researchers Lewis Terman and Leta Hollingsworth came to see that the phenomenon of giftedness could be recognized in children at a fairly early age and nurtured through special education. Such pioneer work led to the creation of special programs in cities like New York, Cleveland, St. Louis, and San Francisco where these children were identified early and received a special, advanced program. Yet efforts were sporadic and tended to develop only where there were committed individuals who devoted their lives to maintaining these programs. The attached charts attempt to trace three aspects of the history of gifted studies: persons of eminence; children found as a result of mental testing; and specific programming efforts.

Although a few psychologists continued to do research in gifted education, it was not until the late fifties—when Sputnik and this country's concern for manpower needs once again focused attention on the issue—that gifted education became a national concern. At that time, programs began to develop under the National Defense Education Act and other funding sources for students gifted in the sciences, mathematics, and foreign langauges such as Russian and Chinese. Yet the approach focused primarily on children with potential in technological and specialized areas, and largely ignored those with talents or gifts in other areas.

By the middle sixties, the national focus shifted significantly, to financing compensatory education programs for disadvantaged and handicapped populations. Little occurred at the national level that addressed the needs of gifted children. However, significant research studies continued and selected programs flourished, such as the NEA project on the academically talented student.

With the seventies came the greatest national interest in gifted education. In 1971, U.S. Education Commissioner Sidney Marland labelled the inertia in public education for educating its future leaders as "talent down the drain", in the report of the congressionally mandated study, a *U.S. Congressional Report on the Gifted and Talented*. This report presented some chilling information regarding the status of the gifted in our public schools. One state reported that 14% of its dropouts had I.Q.'s of 130 and above. Other studies found that 55% of the gifted were serious underachievers and that only 4% were involved in any special program or activities.

In 1972 gifted education became a legitimate entity at the federal level for the first time. Dr. Harold C. Lyon, Jr. became the first national director of a new office, The Office of Gifted and Talented, which was located in the U.S. Office of Education's Handicapped Education Bureau. In 1974, Congress appropriated separate legislation and funding for the gifted.

That first piece of legislation significantly broadened the definition of who the gifted were:

> "The federal government believes that gifted children have exceptional educational needs, that these children exist in all ethnic, religious, and socioeconomic groups, and that these children represent a vast and largely untapped resource to society.
>
> Gifted Children are capable of high performance in one or more of the following areas: general intellectual ability, specific academic aptitude,

creative thinking, and psychomotor ability. Furthermore, their potential for high performance in one or more of these areas requires the education system to create unique and varied programs at all grade levels to assist these children in the development of their special abilities to their fullest potential."

The Act appropriated $2.56 million to serve at least that same number of children nationwide. The money was allocated to four areas for maximum impact: state assistance; local model projects; training; and dissemination. As a result, the majority of states have acted through their own legislative channels to secure support and appropriations for the gifted and talented. In addition, thousands of educators across the country have been informed about the plight of the gifted, and hundreds of local districts have set up programs on their own.

As we enter the eighties we find that budgets for gifted education have increased at the national, state, and local levels. The numbers of gifted students identified and served in the public schools has also increased dramatically. The media have shown an interest in gifted education as evidenced by TV, radio and newspaper coverage. The U.S. Department of Education has shown its increased interest by creating a national advisory group on gifted education. Lobbying efforts by the Council for Exceptional Children have increased. Influential groups within education are forming coalitions to promote the needs of the gifted.

As involvement increases at all levels of the educational enterprise, the prospects for gifted education look bright. It would be foolish, however, to imply that the movement to meet the needs of the gifted is under control. Massive efforts by local and state educators will still be necessary to bring about the "quiet evolution," for it is the teachers and administrators at these levels who will continue to make the difference.

Studies of Eminence

(Focused on backgrounds of adults who already had evidenced accomplishments)

1865	Galton	Conducted studies of eminent men in a variety of professions.
1894	Yoder	Studied childhoods of great men.
1906	Woods	Studied achievement among members of royal families.
1913	Castle	Studied world's most eminent women.
1923	Cattell	Studied American scientists living between 1900-1915.
1926	Cox	Studied biographies and papers of 301 eminent men and women to estimate early intellectual ability. (second volume of *Genetic Studies of Genius*)

General Conclusions:

- Greatness runs in families.
- Children of professionals occur significantly more often as persons of eminence than children of other occupational parentage.
- Eminence occurs in a mathematical pattern in populations.
- Cities contributed significantly more eminent men of science.
- There is a strong correlation between eminence and superior opportunity.
- Solitary play and solitude in general were found to be prevalent among the eminent.
- Most subjects were privately educated.
- Few women were included.

Studies of Mental Testing

(Focused on identifying potential in children by controlled measures)

400 BC	Plato	"We must watch them from their youth upwards, and make them perform actions in which they are most likely to forget or be deceived, and he who remembers and is not deceived is to be selected, and he who fails in the trial is to be rejected. That will be the way."
1904	Alfred Binet	Development of mental tests to separate average children from those of inferior ability.
1916	Lewis Terman	Revision of Binet Scale published; the term "I.Q." first used.
1917	Terman, Otis, Yerkes, et al.	Development of the Army Alpha and Beta Tests.
1920	Lewis Terman	Development of studies on children identified by the Stanford-Binet at 140 and above.
1922-1927	Leta Hollingsworth, et al.	Studies showing traits of physical, social, and other forms of superiority in the gifted.
1924	Spearman	Development of two-factor explanation of intelligence, general and specific.
1925	Lewis Terman	*Genetic Studies of Genius* published, Volume I.
1942	Leta Hollingsworth	Studies of children with I.Q.'s over 180.

Studies of Gifted Programs

(Focused on providing service to gifted students)

1800's	Private school training Parental/tutorial training for such luminaries as John Stuart Mill, Thomas Macauley, and Thomas Edison
1901	Separate school Worcester, Massachusetts
1912-1918	Rapid Advancement Classes Individualized Learning Plans San Francisco, California Winnetka, Illinois Louisville, Kentucky
1918	The Begabtenschulen Berlin, Germany
1919	Terman Classes Special Opportunity Classes Provided enrichment through special instruction in the history and evolutiion of the life of civilized man. New York City, et al.
1920-1923	The Cox Experimental Classes Columbus, Ohio

1921	Cleveland Major Work Classes Cleveland, Ohio
1924	Louise Stedman's class at the University Elementary School University of California at Los Angeles individualized seminar-like work
1940's	Hollingsworth Special Opportunity Program for children with I.Q.'s over 180—New York City

Identifying Gifted and Talented Students

Identification of the gifted depends to a large extent on the scope and nature of the program to be established or, if a district can tailor its program to the capabilities of its student population, then identification will depend on those characteristics singled out and addressed by a specific program model.

General Identification Procedures

An adequate identification procedure should include, at a minimum, a standardized test, a teacher checklist of student behaviors, and one other measure such as past achievement record in the area(s) under examination, parent nomination, peer nomination, biographical data, artistic or intellectual product, or rating by professionally qualified persons such as psychologists, artists, musicians and others with special qualifications.

Standardized Tests. Usually both I.Q. tests and achievement tests are used to identify the intellectually gifted. However, recent research by Stanley et al. at Johns Hopkins University has begun to focus on the use of aptitude instruments for discerning specific talents.

If I.Q. testing is used, the Stanford Binet is still considered the best instrument of its type (Martinson, 1972, Ehrlich, 1974). If an individual test cannot be administered due to lack of money for psychological services, group tests can be employed. However, these are best used for gross screening purposes.

Achievement tests are useful if the program is to address a specific academic area. Used in combination with an off-level aptitude instrument, they offer a more complete profile of student ability in a specific area, usually math or reading. They show a clear profile of student potential, unfettered by an artificial ceiling effect. Examples of such tests include:

Achievement Tests

California Test of Basic Skills
Iowa Test of Basic Skills
Metropolitan Achievement Tests
Ross Cognitive Abilities Test

Aptitude Tests

Scholastic Aptitude Test (SAT)
School College and Abilities Test (SCAT)
Differential Aptitude Test (DAT)

Teacher Checklist of Student Behaviors

While teachers have been notorious for *not* identifying gifted students with any degree of accuracy, the development of behavioral checklists within the last 15 years coupled with an inservice program in how to use them has greatly increased the reliability of this approach to identifying the gifted.

Following is a typical set of criteria used as a basis for teacher judgment. This approach is especially important in the case of elementary-school children.

Circulate to each classroom teacher a paper in which he/she is asked to nominate the:

- Best student
- Child with the largest vocabulary
- Most creative and original
- Child with the most leadership ability
- Most scientifically oriented child
- Child who does the best critical thinking
- Able child who is the biggest nuisance
- Most highly motivated child
- Child other children like best
- Child who is most advanced in academic areas
- Brightest minority group child in the class in case there are more than five and one not named before
- Child whose parents are most concerned about increasing the enrichment of his/her education progress

The percentage of accuracy jumps remarkably when teachers are presented with certain characteristics with which to assess the child's abilities as opposed to the open-ended question, "Is this a gifted child?"

In an attempt to improve the level of teacher accuracy, Renzulli, et al., has developed a rating scale acknowledging specific abilities and behaviors.

The development of the "Scales for Rating Behavioral Characteristics of Superior Students" by Renzulli, Hartman and others, represents an attempt to provide a more objective and systematic instrument that can be used as an aid to guiding teacher judgment in the identification process. To date the following ten scales have been developed and field-tested.

1. Learning Characteristics
2. Motivational Characteristics
3. Creativity Characteristics
4. Leadership Characteristics
5. Artistic Characteristics
6. Musical Characteristics
7. Dramatic Characteristics
8. Communications Characteristics—Precision
9. Communications Characteristics—Expressiveness
10. Planning Characteristics

Depending on the nature of the children under consideration, classroom teachers use appropriate scales to determine the degree to which certain characteristics are manifest. A weighting system is used to score the data once it is compiled.

Past Achievement Record. Many gifted students, especially those at the middle grades and beyond, may be identified by assessing past accomplishments. These may take the form of grades, anecdotal records, commentary by past teachers, or other data in their cumulative record.

Disadvantages of utilizing this criterion include: underachievers will most likely be missed; the information below grade two is probably too sketchy since many times formal grading does not begin at those levels; and many gifted students have been bored, frustrated and turned off by the regular classroom, a phenomenon that can translate into a poor school record.

Parent Nomination. Some research has shown that parents are more effective in identifying gifted students than are teachers. The advantage of using parents is that they sometimes see what children who are not achieving at a high level at school can do at home. Gifted educators have found parents to be almost excessively modest and reluctant about identifying their children to take part in a program.

The Astor Program in New York City, for example, uses a parent inventory and enlists parents of the gifted to do telephone interviews with parents of prospective candidates for the program.

Peer Nomination. Peer inventories are also useful in identifying the gifted, according to some studies. Use of this technique is based on the belief that other children readily know who the gifted are; it remains only for them to be asked in a specific way. Such questions as, "In this class, who would you most trust to get you out of a dangerous situation?" provide the basis for selection.

Biographical Data. Sometimes a good technique for self-nomination is to have students themselves supply information about their interests, hobbies, and accomplishments. This can be done through a variety of means, including interview, writing samples, or taped commentary. It sometimes is most useful as a final determinant in borderline cases.

Products. Popularized recently by Renzulli, the use of products as a determinant of who is gifted has gained some acceptance. Certainly in artistic areas such as music and the visual arts, such techniques as auditions and portfolios have commonly been used. However, the approach holds promise in identifying student creativity and versatility, in academic areas as well.

Professional Ratings. Sometimes educational personnel other than teachers are in a position to identify gifted students, and sometimes individuals outside the school system but with specific expertise can do so. Some school districts use a panel or committee approach to draw on such expertise. The group rates prospective students on the basis of interviews or by reviewing a student portfolio.

Appendices A and B list additional identification procedures as well as alternative methods for gathering data on students for identification purposes.

Identification of Disadvantaged or Handicapped Gifted Children

The need to identify gifted students from disadvantaged populations—including culturally different, minorities, low socio-economic status and rural—and from handicapped populations—including physically handicapped, disabled learning, and emotionally disturbed—is great, yet the task is not easy for at least two reasons. Some educators tend to focus on the debilities of these populations rather than the strengths. Others tend to view the job of the public school as that of raising skill levels to a minimum standard only, and not concerning themselves with the larger job of educating to levels of potential ability.

The selection and programming for gifted students in these categories should be a priority for all school districts because the discrepancy between their current instructional program and one that is appropriate to their ability is probably greater than for other populations of gifted students (with the exception of the highly gifted, some of whom also fall into these categories).

Youngsters from these categories undoubtedly will be chosen for a gifted program as a matter of course, since some will fall within the selection criteria. However, much depends upon the kinds of criteria that are used. If the criteria focus strongly on test scores, youngsters who are from economically deprived or "culturally different" streams will probably be discriminated against due to the cultural bias of many of these instruments. In this case, those involved in selecting students for the program may want to consider several alternatives. One alternative would be to broaden the criteria to include youngsters with a greater diversity of talents or gifts. For example, the criteria might be expanded to include talent in the arts or in social leadership.

Another alternative might be to modify the selection criteria for the disadvantaged population or for those who are culturally different. If the community is 30 percent minority, and if, after screening procedures for a city-wide gifted program have been completed, only two percent of the students selected are minority, then the screening committee may wish to adjust the criteria so that a larger proportion of minorities will be included.

A third alternative would be to augment your identification procedures with parent, teacher or community checklists that include special characteristics that have been noted for culturally different students who have been identified as gifted. Torrance lists eighteen creative positives to look for among this group:

1. Ability to express feelings and emotions.
2. Ability to improvise with commonplace materials and objects.
3. Articulateness in role playing, sociodrama, and story telling.
4. Enjoyment of and ability in visual arts, such as drawing, painting and sculpture.
5. Enjoyment of and ability in creative movement, dance, dramatics, and so forth.
6. Enjoyment of and ability in music, rhythm, and so forth.
7. Use of expressive speech.
8. Fluency and flexibility in figural media.
9. Enjoyment of and skills in group acitivities, problem solving, and so forth.
10. Responsiveness to the concrete.
11. Responsiveness to the kinesthetic.
12. Expressiveness of gestures, body language, and so forth, and ability to interpret body language.
13. Humor.
14. Richness of imagery in informal language.
15. Originality of ideas in problem solving.
16. Problem centeredness or persistence in problem solving.
17. Emotional responsiveness.
18. Quickness of warm-up.

Moreover, Bernal has found specific characteristics of gifted Chicano children:

- Rapidly acquires English language skills once exposed to the language and given an opportunity to use it expressively.
- Exhibits leadership ability, be it open or unobtrusive, with heavy emphasis on interpersonal skills.
- Has older playmates and easily engages adults in lively conversation.
- Enjoys intelligent (or effective) risk taking behavior, often accompanied by a sense of drama.
- Is able to keep busy and entertained, especially by imaginative games and ingenious applications, such as getting the most out of a few simple toys and objects.
- Accepts responsibilities at home normally reserved for older children, such as the supervision of younger siblings or helping others do their homework.
- Is "street wise" and is recognized by others as a youngster who has the ability to "make it" in the Anglo dominated society

Still another alternative would be to state that every building in a district will select the upper three, five or ten percent of its most talented students, and then assume that the "levels of giftedness" from building to building will vary. Thus, a building that draws upon a group of economically deprived youngsters may identify a group of relatively "less gifted" (as indicated by standard test scores) youngsters than a building that draws upon a more affluent population.

The important thing to remember, however, is that whenever adjustments of the type suggested here are made, appropriate adjustments must also be made in the program itself. It would be unfair to include youngsters below a given level in the program, and then to expect them to work at a much higher level (of ability).

Matching Identification Procedures with Program Objectives

Equally important as the criteria utilized for identification is the process by which students are selected for a particular program and the cutoff points used. The following chart outlines key issues in the identification process.

Identification Strategies

Category of Giftedness	Selection Criteria	Instruments	Cut-off Points	Brief Description of Process
Specific Academic Aptitude (Language Arts)	General ability inventory	Otis-Lennon	116+	1. The four criteria will be placed on a matrix.
	Achievement test	Stanford Achievement Test (verbal composite)	1½ grade levels above placement in verbal composite	2. Ranges will be established for each criteria and point values assigned to each.
	Teacher Recommendation	Locally constructed checklist	.5 out of 10 checks	3. Point values will be totaled for each criteria on each student.
	Past grade records	Grade cards	B average in reading and language arts	4. Students will be rank ordered.
				5. The top 20 will be selected for the program.
Specific Academic Aptitude (Mathematics)	Achievement Test	Stanford Achievement Test (math composite)	2 grade levels above placement in math	All students meeting the cut-off points for all three criteria will be accepted into the program.
	Aptitude Test	School College and Ability Test (SCAT)	Students scoring at or above 380	
	Teacher Recommendation	Renzulli/Hartman Scales for Rating Behavioral Characteristics (Sections I and II)	60% of the characteristics	

The following chart demonstrates the importance of the interaction of criteria that determine the range of giftedness which in turn reflects the nature of appropriate program options. This chart is an arbitrary way of looking at a general population of gifted students and of adapting the "interaction" idea to a specific program plan.

Ranges of Giftedness

MILDLY GIFTED ⟶ HIGHLY GIFTED

MILD	MODERATE	HIGH
• 1½-2 Grade Levels Above in Achievement • Manifests 60% of Gifted Characteristics • 116-128 I.Q.	• 2½-3 Grade Levels Above in Achievement • Manifests 75% of Gifted Characteristics • 129-141 I.Q.	• 3½- Grade Levels Above in Achievement • Manifests 90-100% of Gifted Characteristics • 142- I.Q.
APPROPRIATE PROGRAM OPTIONS: 1. Enrichment through an IEP in the regular classroom 2. Special projects 3. Content Acceleration, etc.	APPROPRIATE PROGRAM OPTIONS: 1. Special Classes 2. Content Acceleration 3. Grade Acceleration, etc.	APPROPRIATE PROGRAM OPTIONS: 1. Grade Acceleration 2. Content Acceleration 3. Internships/Mentorship, etc.

Choosing a Program

To select a program for implementation, it is necessary to address several issues, including the match between student needs and the proposed programs, cost-effectiveness, and partial vs. comprehensive program offerings.

If student needs are to be considered carefully, then program administrators must examine several key issues: early identification; grouping; and program models for organization.

Early Identification and Programming

There is a good deal of evidence that suggests that if gifted students are not identified early, and if they are not adequately accommodated early in their school careers, they may begin to turn off from school and fall into a pattern of low achievement in school. It seems highly advisable to identify gifted and talented youngsters early so that teachers can be alerted to their special educational needs. But identification procedures should be continuous: children not identified early may turn out to be gifted and talented at a later age.

Early identification also allows for refinement in the strengths and weaknesses in assessing gifted students at an age when they can be best addressed. Often a youngster who is outstanding in one area, such as language arts, will also be considerably above average in other areas, such as math and science. Even if this is not the case, a student may need different kinds of gifted programming at different levels of development.

If students have been identified as talented in one area, program planners should not assume that they are outstanding in all areas. It is important to remember that the actual program must include only the types of abilities identified in the selection procedures. For example, if you identify a group of students on the basis of high-level talent in science, the program must be for gifted science students. If the criterion used to select these students has been only scientific ability, any other components—such as art, writing and social studies should not be included as an integral part of the program. Although this may seem obvious, it is a frequent program error.

Although early education programs for the gifted are not common, there are excellent ones: Dr. Virginia Ehrlich's Astor Program in New York City; Dr. Halbert Robinson's program at the University of Washington; and Dr. Merle Karnes' program for pre-school handicapped gifted at the University of Illinois.

Grouping of Gifted Students

Many educators who work with the gifted believe it is difficult to find a substitute for putting youngsters of similar abilities, interests, and learning styles together for at least portions of the time. Gifted youngsters enjoy more than almost anything else the opportunity to exchange ideas among themselves without fear of being laughed at or scorned. Some programs may group youngsters only periodically, or once or twice a week, or for a certain time period each day. But generally speaking, some kind of grouping by interest and ability is needed for gifted students.

It is not unusual for problems to develop in coordinating a student's overall program if he or she is removed from the classroom to attend special classes. In order to avoid such problems, program planners should take care to involve the classroom teachers and building principals in the early planning stages so that they will be a part of and be informed about the program their students will be attending. It is also vital to keep the channels of communcation open between the teachers in the special classes and the regular classroom teacher. This can be done through meetings, newsletters, direct contact, etc. It is also important to establish at the outset the conditions concerning absence from the regular classroom. Will a student be expected to go to the special program regardless of what may be going on in the regular classroom? For example, can he or she stay in the regular

classroom for field trips, or for special parties and events? Will students be expected to "make up" what they "missed?" What will be the relationship between the work the student is doing in the regular classroom and the special class? Answers to these questions will vary from program to program, but they should be clarified from the start.

This does not mean that the needs of gifted students cannot be met in the regular classroom. Some teachers manage to meet the needs of all students, at least to some extent, within the regular classroom. However, if a child is highly gifted, meeting her or his needs in the regular classroom may be very difficult. In general, teachers should spend more time considering the needs of their "above-average" students. Virtually everywhere and at all levels of education, classrooms are filled with students who could be doing far more than they are expected to do within the standard curriculum.

Program Models

The logistics of adopting a particular program model vary considerably and depend upon resources available within the local district.

The most common models for gifted programs are as follows:

Elementary

- Separate center
- Resource room program for specified periods of the day/week
- Homogeneously grouped classrooms or cluster grouping where small groups of gifted children are handled within one classroom at any particular grade level
- Mentorships
- Learning centers
- Independent study
- Itinerant teacher working directly with students and the regular classroom teacher
- Special interest clubs
- Special seminars/programs
- Extra-curricular programs (before/after school, Saturday enrichment)

Secondary

- Special higher level classes in core academic areas
- Advanced placement
- Career education/counseling programs
- Interdisciplinary programs (e.g., humanities)
- Independent study
- Internships
- Mentorships
- Special seminars
- Museum programs

While acceleration is not a program per se, it is a strategy that should be considered at any grade level for the intellectually gifted child with an I.Q. of 130 or higher. Grade skipping, telescoping two years of curriculum into one, or content acceleration are all workable approaches. Local districts should be encouraged to combine acceleration with some form of special programming for these students throughout their school careers.

Differentiation

It is generally agreed that most gifted programs should be distinguished from regular programs by having *more* emphasis on the following curriculum considerations:

- Principle of economy (compress or delete from a gifted child's program that which he masters quickly or has mastered on his own)
- Concentration on higher level thinking skills
- Concentration on the interrelationships between and among bodies of knowledge
- Use of content areas that offer appropriate challenge (i.e., logic, philosophy)
- Inclusion of a guidance component whose content focuses on coping with giftedness
- Independent study assignments
- Self-directed learning (exploring fields of knowledge on one's own)

Most would agree that high-level ability not directed in socially constructive directions may become socially dangerous. Thus, programs for the gifted should include components of values education through which the students can learn to examine their values and those of others. Research suggests that gifted students often are very concerned about the moral and ethical dimensions of questions. Encouraging them to consider the moral and ethical side of whatever topic is under consideration will undoubtedly be something that they as a group will respond to. Assuming that gifted students often become the leaders of tomorrow, considering the moral, social, and ethical dimensions of topics seems particularly relevant.

Program Articulation

Any school district that takes on the task of developing a gifted program needs to consider carefully an overall articulation plan that will allow for identification of its gifted population at the kindergarten level, and offer appropriate programming for that population through all grades. Even if funds are not available to implement a total program in any given year, total articulation still can be accomplished within a reasonable period of time. An example might be a three-year plan where programs for K-3 students and high school students are established during the first year; 4-6 students in the second year; and 7-8 in the third year. This way, all students identified in year one will receive appropriate services from the point of identification, yet the district will have an opportunity to pace its program implementation.

Program articulation of this kind is important for many reasons:

- Once a student has been identified and offered a program at any level, he/she has the right to expect that it will continue on some basis.
- Since content acceleration is a facet of many gifted programs, it is very unfair to make students return to a level of work not at their stage of advancement in in order to accommodate the system.
- Growth gains and attitude changes can be adversely affected by programs coming too late in a student's career, or stopping in the middle.

Program Cost

At a time when spending for special education programs is under attack, it is essential that gifted programs demonstrate their cost-effectiveness. Certainly exemplary programs can do that by showing how the district's overall human resources contribute to program success. For example, a district can use psychologists, counselors, principals, etc., already on staff to help implement the gifted program.

In addition, grouping procedures should be examined from a cost basis. Grouping gifted children in a particular building where scheduling allows for multi-age placement, or cluster grouping, is much more economical (no personnel costs) than

a pull-out program where a specialist must be hired. In-school grouping allows you to select and retrain one or two staff members to handle the gifted students as a part of their regular class load.

In the long run, paying for a program coordinator may be more cost efficient than trying to develop the program piecemeal. Materials and training are expensive and often involve recurring costs because of turnover in program staff.

The following alternative programs offer low-cost models that have been implemented with some success in local districts.

Some Examples of Low-Cost Gifted Programs

	Example Program A	Example Program B	Example Program C	Example Program D	Example Program E
Grouping Procedures	Shared instruction periods coordinated through individual education plans made by regular teachers	Cluster grouping of primary-level gifted students to a class, other students are also assigned.	Part-time class of gifted children from a mixed grade grouping for grades 3-5	Separate course/class for gifted middle school students or cluster in class with other students	Individual mentorships or internships set up with community resource persons
Frequency of Contact	150 minutes per week for shared instruction, on-going differentiated education in regular classroom	All day	One hour per day or portion of one day per week (about 300 minutes total per week)	One class period or more per day depending upon student's needs	Two hours or more per week
Site	Each school: Grades 4-6	Each school: Grades 2-3	Each school: Resource room, media center, etc.	Each school	Home studio or work site of mentor
Teaching Arrangement	All 4th-6th grade teachers plan together once a week for gifted students and arrange for a group contact time under leadership of teacher or other person.	One regular primary teacher works with cluster of gifted and with other assigned students.	Itinerant teacher or regular teachers freed for one hour per day work with students.	Junior high teacher conducts advanced instruction in subject as part of regular load.	Students are given release time to pursue independent research generated by mentor or internship. School coordinator meets regularly with students and mentors to discuss progress.
Resources Needed	Training of all teachers involved plus materials.	Aide, resource teacher and/or volunteers to assist plus training for teacher plus materials	Training for teachers plus a room or area to conduct class plus materials.	Training for teachers plus some materials.	Volunteer mentors plus transportation to off-school sites plus a coordinator to find mentors, match students and monitor progress.

Student Contact Time

How much time should gifted students spend in a gifted program? While the answer to this question varies according to the type of program and the general philosophy of the district, it is reasonable to assume that a minimum contact time is necessary for proper evaluation and documentation of student progress. A reasonable minimum for some enrichment programs or process programs might be 150 minutes per week. More exemplary programs tend to provide daily contact time with gifted students, so that continuity of work and individual progress can readily be documented.

Program Strategies

Exemplary gifted programs tend to adopt a variety of strategies rather than just one. They tend to incorporate activities that cluster around the following areas: writing; discussion; selective reading; student projects; and oral presentations.

In addition, instructional strategies emphasize higher-level thought processes, problem solving techniques, and high quality student products. Frequently these become the areas in which the program is evaluated.

Evaluation that attempts to measure the impact of the program on the student as determined through pre- and post-test measures is important. Such an evaluation can only be performed with well-defined objectives that reflect student need.

Example:

Need area identified:	Writing expository compositions for students in grade six (documented by teacher's checklist of need).
Gifted program objective:	At least 80% of sixth grade gifted students will demonstrate proficiency in expository composition, at a ninth grade level as determined by a pre- and post-writing sample reviewed by the district's ninth grade teachers.
Evaluation:	80% of the students will improve skills at least 2½ years beyond placement as measured by an objective comparison of writing samples administered in September and June.

Parent Education

Another characteristic common to exemplary gifted programs is that they have established a parent education program that extends well beyond the orientation phase.

An ideal parent program would examine the following options and offer as many as possible:

- A parent organization that involves professionals, to share information, promote advocacy activities and help individual gifted students
- A series of parent seminars that focus on needs and nurturance of gifted children at home
- A volunteer program which involves parents as speakers, field trip organizers, part-time guest instructors, drivers, etc.

Administrative Leadership

Programs with a history of success also have a history of significant involvement by the program administrator. Exceptional leadership skills are required to simultaneously pull together the disparate parts of program development and bring about change within the school district.

The support of top level administrators is crucial to advancing and maintaining a gifted program: few teacher/coordinators can make a dent in the system without it. Once convinced of the need, superintendents and their assistants have the capacity to mobilize people and other resources in a very short period of time and use them effectively to further the program at critical points.

The U.S. Office of Education funds model projects which include exemplary programs, and could provide you with program contacts. The state of Illinois has published a Handbook of Exemplary Gifted Programs, which is available through the state department, and which outlines twenty-one such programs and lists contact people and available materials.

For more information, write to:

Office of Gifted and Talented
U.S. Office of Education
Donohoe Building, Room 3835
400 Maryland Avenue
Washington, D.C. 20202

Gifted Programs
Illinois Office of Education
100 N. First Street
Springfield, Illinois 62777

Funding a Program

The Federal Government: Monies from the Special Project Act, P.L. 95-560

The funding available from the federal government specifically for gifted education must be sought through individual state departments of education. For fiscal 1981, a minimum of $50,000 per state was awarded with the stipulation that 90% of it would flow through to local districts on a competitive basis.

Title IV-C

A federal program administered through each state department of education. This program funds innovative and exemplary programs according to each state's pre-determined priorities. Many gifted projects have been funded through this source, particularly in New York, Wisconsin, Indiana, and Ohio.

State Reimbursement or Personnel Funding

All states with state funding have application processes for those dollars. They require that local school districts have a plan for establishing a gifted and talented program, and be able to demonstrate the program's effectiveness. Contact individual state departments of education for details on amounts available and individual procedures.

Local Funding

Each local board of education may allocate specific dollar amounts to support a gifted and talented program. Many local boards of education are keenly interested in seeing this population served and therefore are willing to commit some money to it. If administration personnel can demonstrate the cost-effectiveness (see the following models) of such programs, they can convince a board fairly easily of the program's worth. The majority of programs currently operating across the country receive some amount of local funding in order to operate.

Foundation Support

Foundation support has been the major source of help for gifted and talented research efforts in recent years: The Spencer Foundation, to support the eight year Hopkins effort, and the Ford Foundation to support Fox's follow-up work on gifted

girls in mathematics; the Astor Foundation to support Ehrlich's work with young gifted children; and the Martha Holden Jennings Foundation in Ohio to support smaller efforts there. Foundations are worth pursuing because of the type of efforts they will support. A foundation directory is available in local libraries.

Community Group Support

Many local groups such as the Junior League and the American Association of University Women are willing to sponsor special projects to aid programming for the gifted. Even parent groups are willing to organize for this purpose.

An administrator looking at funding for a gifted program must:

- Decide on a single source or several, based on local conditions
- Explore the most cost-effective yet acceptable administrative models
- Decide on two approaches which seem the most feasible and offer them as alternatives to money sources

Key Points Summary

- A national definition for the identification and appropriate programming of the top 3-5% of the school age population according to the nature of their giftedness has been adopted and modified in some states.
- Gifted education espouses a philosophy that recognizes the special characteristics and needs of gifted children from all cultural and socio-economic backgrounds.
- The history of the gifted and talented movement dates back to early studies of eminence and the mental testing phenomenon in the 1900's in this country. Recently increased national attention and interest in gifted education have generated more popular support now than ever before.
- Identification of the gifted is facilitated by giving special attention to the use of a multi-criteria approach and to consideration of special populations like the disadvantaged and handicapped.
- Gifted children need programs that incorporate acceleration, grouping, and enrichment opportunities.
- Creativity is a construct that should be developed as a part of all gifted programs.
- The key to differentiating gifted programs lies in a recognition of the characteristics of the gifted applied to curricular designs.
- Program models vary at the elementary and secondary levels, and are dependent on available resources and acceptance of particular grouping procedures.
- Program articulation is an important commitment that should be made by districts who intend to provide systematic programming.
- Gifted program costs are closely related to the nature of the program and are especially affected by grouping procedures. Several sources of funding for gifted programs currently exist.

Part Two—
Setting Up a Program

Setting up a gifted program requires a series of well-planned steps that district administrators must grasp in order to delegate many of the specific responsibilities to others. Think of these steps as an administrative checklist that will insure program development along appropriate lines. Individual district timetables should be established around each step. Administrators will also want to hold monthly conferences with program coordinators to discuss progress and potential problem areas.

Step 1: Set Up a Steering Committee

To discuss philosophical attitudes and possible barriers to establishing programs for the gifted, it is essential to have a representative testing ground. A steering committee made up of members from the following groups is one way of determining the "threshold of tolerance" for gifted programs and of providing help in actual program planning. At a minimum, members should represent these areas within the district structure:

- Administration (central *and* building)
- Teacher(s)
- Parent(s)
- Student(s) identified as gifted (junior high school age and older)
- Pupil personnel (counselor or social worker)
- Psychologist

The steering committee should address the following questions and agree on a general programmatic thrust:

1. What group of gifted students is most in need of special programming within our district: intellectual, creative, other?
2. What are their needs from a programmatic point of view: more in-depth work in academic areas, more creative projects, more independent work, etc.?
3. What organizational approaches to a program would be appropriate: a separate center or magnet school, part-time grouping in individual buildings, grouping within the regular classroom, etc.?
4. At what grade level(s) should the program begin and how great a span should it encompass initially?

The work of the steering committee should be used to conduct the second step in planning, namely formal needs assessment. In a sense, the steering committee will have brought data forward in an informal manner that would document the need for such a program. However, a formal assessment of needs at this stage is important.

Step 2: Conduct a Needs Assessment

It is useful to have an understanding of student and program needs to plan gifted programs because it is the interaction of student data and program data which will lead to decisions about the final product—your gifted program.

Student needs can be determined by surveying students, teachers, and perhaps parents. It is usually easier to provide a list of "typical" needs of gifted students and ask respondents to rank those needs they feel are most important:

Needs of Gifted Students

1. To be challenged by activities that enable them to operate cognitively and affectively at complex levels of thought and feeling
2. To be challenged through opportunities for divergent production
3. To be challenged through group and individual work which demonstrates process/product outcomes
4. To be challenged by discussions among intellectual peers
5. To be challenged by experiences which promote understanding of human value systems

6. To be challenged by the opportunity to see interrelationships in all bodies of knowledge
7. To be challenged by special courses in their area of strength and interest which accelerate the pace and depth of content
8. To be challenged by greater exposure to new areas of learning within and without the school structure
9. To be challenged by the opportunity of applying their abilities to real problems in the world of production
10. To be taught the following units:
    a) critical thinking
    b) creative thinking
    c) research
    d) problem-solving
    e) coping with exceptionality
    f) leadership

The needs most frequently identified from this list can be clustered for purposes of establishing goals and objectives for the student's program.

Or, one might identify a sampling of students who are considered gifted or talented, and then examine their current classroom experiences. This is done in order to determine the extent of the gap between what these youngsters are capable of doing and what they are actually doing in their classrooms. For example, what kinds of assignments are they being given? What is the over-all cognitive level of the discussions they are taking part in? To what extent are they given opportunities to work independently? To what extent are they grouped with other students within the classroom who have similar abilities and interests? To answer these questions, one person or a team will probably have to talk to the teachers and make classroom observations. Interviewing the students themselves may be a good technique—or, in the case of young children, interviewing their parents. Written survey forms may also be used.

Program needs can also be determined through a survey. To save time, it might be wise to call together a group of teachers and administrators interested in gifted education (no more than twelve) to determine the following kinds of issues:

- Who should be involved in the program: teachers, administrators, parents, psychologists, counselors, etc.?
- To what extent should they be involved, and for what specific purpose (e.g., psychologists for testing only?)
- What should be the content focus of the program: academic areas (if so, which one(s), thinking skills, critical and/or creative), interdisciplinary (if so, which content clusters)?
- How should the program be organized?
- What should be the overall program model?

When coupled with the student assessment data, the information gleaned from this group will serve as groundwork for the job of program design. Once this step has been completed, a coordinator can be appointed.

Step 3: Appoint a Coordinator

Even if you are a small district, having *one* person in charge of planning your program will save considerable time in implementing it. At this stage, the coordinator should focus on the following tasks:

- Aggregating the needs assessment data and using to develop a program plan, including goals, objectives, and types of appropriate activities for students
- Developing a plan for technical assistance in gifted education (i.e., what are the training needs?)
- Developing and implementing an identification process

Approximately two to three months will be necessary for completion of these tasks, which are critical to a successful program. These tasks should be an ongoing part of the coordinator's duties in addition to conducting meetings with relevant groups about the program, working in curriculum development, developing and implementing the evaluation component, and acting as a gifted resource conduit within and without the district. The coordinator also should be responsible for all relevant reports and public relations items written about the program.

Your coordinator needs to have enough authority to carry out these responsibilities. For this reason, your selection of a coordinator is important: ongoing duties will require a certain finesse in terms of working with people, understanding how to set up programs, and a working knowledge of gifted education.

In addition to these qualities, the coordinator should possess the following:

- Course work in gifted education (depending on the state, anywhere from 6-24 hours may be considered necessary)
- Experience in working with gifted children directly, either in a small group in a regular classroom or in a special program
- Administrative experience and/or course work that reflects an understanding of how schools operate and how innovation occurs

Step 4: Delineate a Program Model

Given the needs assessment information, the coordinator should develop a program model that addresses the following components:

1. Summary of assessment data
2. Nature of population to be served
3. Programmatic approach to be used
4. Curricula to be explored
5. Overall program design (goals and objectives)
6. Program organization and schedule
7. Staff involvement
8. Evaluation approach
9. Budget considerations

With budgetary restraints, it is advisable to work out alternative budgets based on alternative approaches to numbers 3-7 above so that the superintendent and the board of education can easily see the effects of reduced funding.

Step 5: Develop a Technical Assistance Plan

In order for a gifted program to be implemented successfully, it is necessary that all people in the district be aware of its existence and purpose. In addition, those individuals working closely with the program need more indepth information on the nature and needs of gifted children. Also, since gifted programming is still somewhat embryonic, a provision for sharing among gifted programs can be extremely profitable.

Thus a technical assistance plan should address at least three levels:

- **Level One: Awareness**

  This level can be best accomplished through brochures, newsletters, and workshops. The information should be available to all educational personnel and parents as well as key community leaders. Content should focus on the who, what and why of the district gifted program, as well as provide information on the general characteristics and needs of gifted children.

- **Level Two: Developmental**

  This level of technical assistance can best be accomplished through extended workshops and group consultations. It should be available primarily to those individuals working directly with the gifted program. Content should focus on specific developmental issues, such as assessing individual student needs, *or* specific project models for working with students gifted in language arts, *or* how to teach critical thinking to the gifted.

- **Level Three: Reflective**

  This level of technical assistance can best be accomplished through a seminar approach. Seminars should be available to educators integrally involved with the program for at least one year and should attempt to involve several districts for purposes of exchange. The seminars should focus primarily on strengths and weaknesses in gifted programming, and should be conducted as problem-solving workshops by a consultant with group process skills.

Ideally, the technical assistance plan should also have minimum expectations for participants at each level. For example, at the awareness level, participants should gain information about the gifted program that can be documented. At level two, participants should be able to analyze the programs and make recommendations for modification based on seminar discussions.

Once the plan has been devised, the logistics of doing a newsletter and setting up workshops must be addressed. These tasks can and should be done at the same time that students are being identified and the program plan is being approved.

Step 6: Develop and Implement an Identification Process

Some experts in the field might argue that identification should occur earlier in the process of starting a program. However, it is critical that the program and the population selected match up in a defensible fashion. And it is very easy to identify a population you cannot serve if the nature of the program and the resources available to carry it out are not in place first. Therefore, it is recommended that students not be identified until a program plan has been worked out. However, it should be remembered that the general focus for identification has already been determined by the steering committee.

Approaches to identification differ greatly among districts. The following factors should be carefully considered:

- **Both objective and subjective data should be used.** Recommendations should be balanced by tests that document performance and/or potential.
- **At least three criteria should be used in the process.** In the state of Illinois, for example, the three most frequently used criteria for programs for the intellectually gifted are: teacher recommendations; achievement tests; and intelligence instruments.
- **Develop an identification process.** Once you have determined the criteria for consideration, you must create a system for determining that selection. Will all criteria weigh equally? Will a point value be assigned to each? Will the selection be made on points or by a person or committee examining other factors?
- **Include at least two criteria that you already have easy access to such as scores on annual achievement tests, I.Q. tests on file, etc.** More testing usually means more time and money.
- **The cooperation of classroom teachers is critical to the program's success.** Teacher recommendations may be time-consuming, but they are an important part of the process.
- **Be sure the instruments used for selection of students are appropriate to the nature of your program and defensible in terms of identifying giftedness.** For example, if you are going to initiate an advanced math program for sixth graders, math scores on achievement and aptitude tests are more important to consider than an I.Q. test score. Research evidence as well as common sense suggests the feasibility of such an approach.

Once students have been selected, meetings should be scheduled with them and their parents to discuss the nature of the program. "Permission to participate" cards should be collected from parents and "commitment" cards from students. This approach is a good way to gain early acceptance *and* responsibility for the program from those who will be most affected by it.

Step 7: Decide on a Curriculum Development Plan

Curriculum development for the gifted means integrating the following components in a way that fits the goals and objectives of a particular program design:

- Content
- Model (organizing principles)
- Strategies
- Materials

Some program coordinators would see one of these components as more important than others. For example, districts using the Hopkins SMPY model would place a great emphasis on content while those districts using the Enrichment Triad might focus more on strategies. Work with SOI implies a heavy concentration on the model itself as the primary vehicle for generating curriculum. Thus the focus of a curriculum plan depends upon the general direction dictated by the program model. No one model has been judged superior to any of the others and all offer interesting and productive approaches for working with gifted students. In fact, many programs, such as Project Reach in St. Paul, Minnesota, attempt a synthesis approach and cull the best from each model to form a curriculum plan.

Content Approaches

Perhaps it is useful to consider the content approaches currently used in gifted programs in order to evaluate the possibilities. Gifted programs can be categorized thusly:

- **Traditional content acceleration programs**

  These programs are typically in core academic areas such as math, science and reading/language arts, and incorporate a faster pace and greater depth for gifted students in that area. Examples are science courses at The Bronx High School of Science, advanced placement courses at many high schools in sixteen different and academic areas, and the Junior Great Books program in many elementary school districts.

- **Process programs**

  These programs are based on the rationale that gifted students should develop important skills that can be used with all content areas. Thus many districts have adopted programs in critical thinking, research and independent study skills, and rational decision-making. Examples are numerous, but few packaged programs exist in this area. A notable exception is the Purdue Independent Study Program. Some "workbooks" which teach these skills are available.

- **Independent mode programs**

  These programs are based on the idea that gifted students should be encouraged to be independent learners early and to a greater extent than other students. Examples of such programs are internships such as the Executive Internship Program; mentorships; and two important program models—Feldhusen's Purdue Three-State Enrichment Model and Renzulli's Enrichment Triad. A popular and sometimes mandatory organizational approach to this kind of program is the Individualized Educational Program (IEP). The IEP provides documentation of student assessment data and educational recommendations for growth in many areas.

- **Multi-disciplinary programs**

  These programs build on the characteristics of gifted children being able to understand interrelationships and grasp meanings more readily than the average child. Examples include humanities programs and technology programs which incorporate computer science with other fields. The Astor Program in New York City is a good example of a multi-disciplinary program at the preschool level.

- **Enrichment programs**

  While the term is difficult to define, the term is used here to refer to "new" content areas for the gifted to which they have not been exposed in the regular school curriculum, but which represent, by their very nature, challenging content. Examples include courses in law, such as the program developed at Chelmsford, Massachusetts; logic, such as the one in Plainsfield, New Jersey; and philosophy, such as the program developed at Montclair State College. The increased interest in the teaching of foreign langugage to the gifted is another example of this kind of enrichment.

Organizing Principles

Once a content approach has been selected, it must be organized in such a way as to maximize the abilities and potential of gifted students. Several organizing principles employed by numerous gifted programs are:

- Bloom's Taxonomy
- Guilford's Structure of the Intellect (as translated by Mary Meeker into curricular adaptations)
- Frank Williams' Model for Implementing Cognitive and Affective Behaviors
- The Purdue Three-State Enrichment Model
- Renzulli's Enrichment Triad
- The Johns Hopkins SMPY protocol

Bloom's Taxonomy. A structured learning theory that consists of five hierarchal stages: knowledge, comprehension, application, analysis, synthesis, and evaluation. Since gifted students function well with higher level thinking processes, many programs structure activities for students that address the top three levels. For example, sixth grade gifted students in groups are assigned the task of *analyzing* recent movies they have seen with respect to technical aspects, artistic aspects, central idea, and level of acting power. The group must present to the rest of the class a *snythesized* exploration of those elements. Then students *evaluate* the merits of each movie and conduct a mini Academy Awards.

Guilford's Structure of the Intellect. The structure of the Intellect is a model of 120 defined intellectual abilities. The three dimensions of the model specify the operations, contents, and products of any given intellectual act. In addition, each dimension has definite descriptors that characterize it. Dr. Mary Meeker has adapted this model to specific curricular packages within all the major content areas. Once the general operating principle of the model is understood, teachers can begin to structure appropriate activities for the more specific intellectual needs of gifted children.

Frank Williams' Model. This model uses the notion of student and teacher behaviors as a construct for curriculum design in the traditional content areas. Thus students can engage in attribute games or deal with paradoxes, depending on the behaviors targeted in the lesson plan.

Purdue Three-State Enrichment Model. Developed by Dr. John Feldhusen, this model focuses on the development of productive thinking skills and their application to functional product development by gifted students within or without the school setting.

Renzulli's Enrichment Triad. Developed by Dr. Joseph Renzulli, this model presents three stages of developmental activities: general exploratory; group training; and individual and small group investigations of real problems. The third stage is emphasized because of its unique applicability to gifted students.

The Studies of Mathematically Precocious Youth. The Johns Hopkins model focuses on the identification and facilitation of highly gifted students in specific academic areas, predominantly mathematics. Use of the model requires aptitude testing and the organizing of fast-paced classes or individualized instruction for these students.

Strategies

All gifted program curricula need to employ good teaching strategies, some of which are more conducive to certain kinds of programs. For example, inquiry teaching is a wonderful technique in social studies and English—courses in which discussion is a key component—while it may not be as helpful in foreign language or mathematics where application of skills is overriding. In the final analysis, it might be said that strategies for working with the gifted are more heavily predicated on understanding their needs than on demonstrating special techniques. However, at a minimum, a teacher of the gifted should have in his/her arsenal the ability to do inquiry teaching, ask good discussion questions, organize small groups and independent work, and lecture effectively.

Following is an example of group and independent work organized by a teacher of the gifted:

> Once each week the students work with a teacher who supervises individual projects. The teacher's role is to facilitate the children's activities. A general outline of student activities follows. Students identify an interest area and complete a web (Kaplan). They develop questions which they want to answer during their investigation, and they form a generalized question for study. Students find out about their interest area by using all available media and by interviewing professionals in the field. During this information-gathering process, students take notes and keep a bibliography. The children create an original product which demonstrates that they have answered their question for investigation. Oftentimes this is a primary research paper or an artistic product. The work approximates that of a professional. Students prepare and give a presentation of their work to other students and, where appropriate, community members. The youths write a formal evaluation of their products, based on audience and their own response. Whenever possible, students submit their projects for publication, competition, or display.

Materials

Another component of curriculum development is materials. Since there are no such things as "gifted materials," it is useful to examine criteria for selecting materials appropriate to gifted students:

- Materials should be geared to an appropriate reading level (usually higher than student's grade level).
- Materials should stimulate discussion opportunities in small groups.
- Materials should be diverse with respect to variety, point of view, and the integration of cognitive and affective components.
- Materials should be geared to complex thought processes, especially the development of analytical skills.
- Materials should be supplementary, not the substance of the program.

The sources for curriculum materials for the gifted are varied. Listed below are some resource checkpoints:

- An ERIC search may be initiated in the specific area(s) you are seeking information; many excellent gifted curriculum materials can be discovered this way. Contact the ERIC Clearinghouse For The Handicapped and Gifted located at the Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091.
- Curriculum bibliographies may be obtained by contacting the program coordinator of individual model programs throughout the country.
- State departments develop good curriculum materials in gifted education. Write to the state consultant for gifted programs for specific information.
- Some packaged curriculum materials are excellent for use with gifted students, such as Junior Great Books, Philosophy for Children, and Cemrel's Math Program.

However, there are many materials now being sold commercially which are of little help in building a sound program. Try to avoid building a program around "workbooks".

Step 8: Select Teachers

Teacher selection is an extremely important step in program development. The teacher is the single most important factor in whether or not a program benefits gifted students. Generally teachers tend to nominate themselves for consideration in such programs. This is fine as one part of the process, but should not be the only factor. Certain qualities are essential to a teacher of the gifted:

- **Good academic record.** The prospective teacher of the gifted need not be as gifted as many of the students, but he/she cannot be borderline average either.
- **Keen interest in at least one academic or creative area**
- **The ability to be flexible in terms of time, pace, materials, instructional patterns, etc.**
- **A good sense of humor**
- **A strong individual who is not easily intimidated**

More complete lists of teacher characteristics are available in the Gallagher and Gold texts (see bibliography).

A process for teacher selection you might wish to consider would incorporate the following steps:

1. Accept self-examination through an application form.
2. Study the records of those who apply, keeping in mind key characteristics.
3. Observe candidates in the classroom, using the Martinson-Weiner scale.
4. Interview individually or by committee the top candidate.
5. Select according to the criteria to the extent that the criteria mesh with district policy.

Remember, these teachers must also be energetic and creative in terms of shaping a program that is a model for the district.

Step 9: Implement the Program

Start-up times for gifted programs vary, but allowing twelve months is advisable: six months to plan the program and another six months to implement it, even if only on a pilot basis. Planning is essential to making the program work, but too long a time expended for this effort can dampen enthusiasm and support. Thus moving into the program at this stage is important. Curriculum can be developed during the program as long as the overall conceptual ideas are in place and teachers feel comfortable working with these students. Ideally, spring and summer planning with fall implementation is best, but winter implementation can work after first semester planning.

The first six weeks of implementation yields much information crucial to program continuance. The following problems are apt to occur or will surface, if they are going to, at that time:

- **Selection of students who don't fit the program**

  Possible solution: Have in place a policy to facilitate moving students in and out of programs. Such a policy should be in place when the program is set up and let parents and students know about it at the orientation session. Also have an alternative to suggest for such students, such as meetings with counselor, or special projects.
- **Disenchantment from teachers who "lose" students to the program**

  Possible solution: Keep these teachers carefully informed of what is happening in the program, how *their* students are progressing, and how *they* can help.
- **The feeling of being overwhelmed/overworked as voiced by students**

  Possible solution: Lay out student expectations at the orientation meeting, complete with estimates of extra time involvement. Listen to concerns and try

to help. Sometimes the gifted program is the first time a student has been challenged and therefore he/she doesn't know how to cope. Let some time pass.

- **The feeling of being overwhelmed/overworked as voiced by the teachers**

  Possible solution: More planning is a good remedy for this problem. New programs are energy-draining, but should not make excessive demands. Another approach might be to allow some additional time off for planning and for attending sharing sessions with other educators in gifted programs.

Step 10: Evaluate the Program

For an administrator, evaluation is important because it aids in improving programs and in making decisions about program worth and desirability on an ongoing bais. It is especially important to evaluate gifted program efforts carefully because of the tenuousness of long-term financial commitment to such programs by school boards. Good data alone won't necessarily maintain a program, but it becomes much more difficult to do so without it.

Two kinds of data need to be collected: student data and program data. In designing a gifted evaluation, structure questions that you want answered about the program, such as:

- **How have students benefited from this program?**
- **Are students operating more independently now than before?**
- **How well does the identification process work?**
- **How effective is the staff development component?**

Incorporate such questions into a format that allows for appropriate instrumentation selection, timetables for data collection, and data collection procedures. The format should also allow for involvements by all persons in the process.

The people you involve in evaluation of your program are crucial to how it will be judged by others. If you only involve teachers in the program, then it won't be as convincing or as thorough than if you surveyed others on their perceptions of the program. Students, parents, building administrators, and teachers both in and out of the program should be surveyed.

Decide early if you are more committed to student growth gains in the program areas as measured by tests, or if you feel data that reflects improvement/growth in student attitude is equally or more important. Ideally, both types of data should be sought. Yet the documentation for student academic gains in gifted programs is difficult to procure and will require extra time to develop.

Source books for evaluating gifted programs are also useful. After you have developed criteria for rating your gifted program, look at Renzulli's *Guidebook for Evaluating Programs for the Gifted and Talented* and the *Illinois Handbook on Gifted Program Evaluation.*

Step 11: Use Community Resource

While the community is not an essential component of successful gifted program development, it is a tremendous resource that can be used to enhance *any* gifted program. A key to community involvement is identifying key contacts and developing a resource directory. Key contacts can come from civic groups—some of which are very predisposed toward helping gifted education—such as Women's clubs (The Cleveland Major Work program was begun through their efforts), American Association of University Women, Junior League, League of Women Voters, as well as from other civic and professional organizations.

Other important contacts come through universities in your area. Many university personnel can be approached about helping with gifted programs without a fee because of their natural interest in such students. They are a good source for establishing mentorships.

School district personnel can also be tapped for program development. Curriculum specialists and pupil personnel workers are often very willing to work on some aspect of the gifted program.

If you are seeking additional funds it might be wise to solicit corporations with headquarters in your area or foundations who have expressed at lest tangential interest in this field. The Chamber of Commerce, local commerce and industry which often fund special projects, are also good prospects.

What can the community offer a gifted program? Many universities have begun special Saturday programs that effectively implement district programs. The University of Toledo, Purdue University, University of South Florida, and the University of Colorado are examples. Civic groups can undertake (and sometimes underwrite) a special project for gifted students, working as volunteers in the schools for a specified period of time. Other groups can offer advocacy support. Community institutions such as museums can work cooperatively with a school district to establish programs on-site for gifted students. The Chicago Museum Program, for example, has students spend one day a week at one of eight Chicago museums learning the craft of a curator.

Step 12: Structure a Counseling Component

The need for gifted students to receive counseling help has already been cited. Too many gifted students currently receive incidental counseling at best, which ill prepares them to make decisions about their school program or focus on career options. It also fails to prepare them for coping with being gifted.

Work to involve school counselors with the gifted program and encourage them to meet with these students in small groups on a regular basis. Some of the issues of coping that a counselor can explore with identified gifted students include discussing questions like the following, which capitalize on affective aspects of being gifted:

- How do you feel different from others? Knowing that each person is unique, how can you cope with the ways in which you differ?
- What do you perceive to be your strengths and weaknesses? How can you capitalize and minimize, respectively?
- Why do you like to work alone? When do you prefer not to and why?
- How do you handle criticism? Do you feel "picked on" when suggestions are made to you?
- Do you feel confident about your ability? How do you "practice" it with others?
- Do you criticize yourself for mistakes? How do you feel when you make mistakes?
- Do you like to lead others? In what kind of enterprises?
- How do you make decisions?

The school counselor or other designated person should work with identified gifted students at least twice a month in a group setting to explore these kinds of issues. They should also provide special programs, perhaps once a month, in school and career opportunities based on the perceived needs of the group.

Sometimes teachers or the coordinator of the program would like to be involved with this aspect of the gifted program. They should be encouraged to participate, for much can be learned about gifted children in general and yours in particular from such informal sessions.

Step 13: Keeping Your Program Going

Most people who approach the establishment of gifted programs at the district or state level can be rightfully termed "change agents" because instituting a new program requires more ability to be a catalytic force and to convince others of the merits of such a program from planning to rough implementation.

Obviously, there are key people who must be convinced: decision-makers like superintendents and school boards; participants like students, parents, and teachers who will mold the program; and observers like other teachers and administrators not directly involved with the program. Without the cooperation and even outright endorsement of these groups, the program will have a difficult time sustaining itself.

Keeping a program going can also be thought of as a planned process, that is responsive to all interested individuals, and keeps them informed and involved by building on past efforts and group cohesiveness. Havelock's model on change theory is useful as a tool in understanding the change process and using it effectively within your own program. (see attached model)

Stage I of his model deals with building a relationship between change agent and client. This stage should be accomplished through planned interaction with key personnel involved with the program. Regular meetings with staff as well as others who have concerns about the program is advisable.

Stage II deals with diagnosing the problem. As a result of such meetings, both formal and informal, you can begin to assess where the resistance is and what form it takes.

Stage III addresses the issue of acquiring relevant resources. Once you understand the problem and its ramifications, you may be able to get support from key individuals within your purview.

Stage IV, choosing the solution, should be worked out in a collaborative context in planning and in work sessions with the involved parties.

Stage V, gaining acceptance, should be achieved through frequent contact and consultation with affected groups as well as through the dissemination of program information on a regular basis.

Stage VI reflects the need for stabilizing the innovation (in this case, the gifted program) and generating self-renewal. You are working to see that gifted students are appropriately served. It is conceivable that the new program, although carefully structured, may not be the most efficacious. Thus, your task now becomes to modify and revise the program without losing support for providing special service. Your evaluation data coupled with on-going planning sessions should lead you toward your goal.

Key Points Summary

- Set up a steering committee to guide the initial planning of a gifted program.
- Conduct needs assessment activities that combine an understanding of student and program needs with concern for the perceptions of several groups.
- Appoint a coordinator for gifted program.
- Have your coordinator develop several plans: a technical assistance plan, an identification plan, a curriculum development plan, and an evaluation plan.
- Select teachers carefully, using a multi-criteria approach.
- Expect to experience start-up difficulties, and be prepared to iron them out with careful planning.
- Use community resources as a valuable enhancement to your gifted program.
- Plan to provide gifted students with needed counseling as an adjunct to their overall program.
- Be prepared to apply change theory concepts to assure program stability and continuity.

A final note—

"All worthwhile men have good thoughts, good ideas, and good intentions

but

precious few of them ever translate those into action"

John Hancock Field

For gifted education to achieve its goal of insuring that all children with high potential fully realize that potential, *you*, the administrator, must initiate the action. Will you?

National Organizations for the Gifted

National Association for Gifted Children (NAGC)
Route #5, Box 630A
Hot Springs, Arkansas 71901

The Association for the Gifted (TAG)
c/o Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
(Publishers of *Journal for the Education of the Gifted)*

American Association for Gifted Children (AAGC)
15 Gramercy Park
New York, New York 10033

National Council for the Gifted
Box 222
South Orange, New Jersey 07079

American Young Mensa (Gifted)
c/o Mensa
50 East 42nd Street
New York, New York 10017

Mensa
1701 West Third Street
Brooklyn, New York 11223

Foundation for Gifted and Creative Children
395 Diamond Hill Road
Warwick, Rhode Island 02886

National Association for Creative Children & Adults (NACCA)
8080 Spring Valley Drive
Cincinnati, Ohio 45236

Journals and Other Regular Publications in the Field of Gifted Education

G/C/T, a magazine published five times a year for parents and teachers, edited by Dr. Marvin Gold, P.O. Box 6654, Mobile, Alabama 36606

Gifted Child Quarterly, official journal of the National Association for Gifted Children (NAGC) edited by Dr. Donald Treffinger, 160 Monroe Drive, Williamsville, New York 14221

The Journal for the Education of the Gifted, official journal of The Association for Gifted (TAG-CEC), edited quarterly by Dr. Kenneth Seeley, General Classroom Building 138, University of Denver, Denver, Colorado 80208

Roeper Review, a journal on gifted education, edited quarterly by Ruthan Brodsky, Roeper City and County School, 2190 N. Woodward, Bloomfield Hills, Michigan 48013

An Administrator's Professional Bibliography on Giftedness

(Addresses for Publishers Provided Where Available)

Barbe, Walter B. and Renzulli, Joseph S. ed. *Psychology and Education of the Gifted* (third ed.), Irvington Publisher, 551 Fifth Avenue, New York, New York 10176, 1981.

Clarke, Barbara, *Growing up Gifted*, Charles E. Merrill Co., Columbus, Ohio 43216, 1979.

Colargelo, Nicholas and Zaffrann, R.T. (Eds.) *New Voices in Counseling the Gifted*, Kendall/Hunt Publishing Company, 2460 Kerper Boulevard, Dubuque, Iowa 52001, 1976.

Feldhusen, John and Treffinger, Donald, *Teaching Creative Thinking and Problem Solving*, Kendall-Hunt Publishing Company, 2460 Kerper Boulevard, Dubuque, Iowa 52001, 1976.

Gallagher, James J., *Teaching the Gifted Child* (rev. ed.), Allyn & Bacon, 470 Atlantic Avenue, Boston, Massachusetts 02210, 1975.

Gold, Milton,, *Education of the Intellectually Gifted*, C.P. Merrill & Co., Columbus, Ohio, 1965.

Gowan, J.C. and Bruch, C.B., *The Academically Talented and Guidance*, Houghton-Mifflin Co., Boston, Massachusetts, 1971.

Gowan, J.C. & Torrance, E.P.., *Educating the Ablest*, F.E. Peacock & Co., Itasca, Illinois, 1971.

Guilford, J.P., *The Nature of Human Intelligence*, McGraw-Hill, New York, 1967.

Guilford, J.P., *Way Beyond the IQ*, Creative Education Foundation, Buffalo, New York, 1977.

Hauck, Barbara B. and Freehill, Maurice F., *Gifted Case Studies*, Wm. C. Brown Co., Dubuque, Iowa, 1972.

Jordan, June B. and Grossi, J.A. (Eds.) *An Administrator's Handbook on Designing Programs for the Gifted and Talented*, Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091, 1980.

Keating, D.P., *Intellectual Talent: Research & Development*, The Johns Hopkins University Press, Baltimore, Maryland 21218, 1976.

Khatena, Joe, *The Creatively Gifted Child: Suggestions for Parents and Teachers*, Vantage Press, New York, New York, 1978.

Meeker, Mary, *Advanced Teaching Judgment, Planning and Decision Making*, SOI Institute, El Segundo, California, 1976.

Newland, T. Ernest, *The Gifted in Socio-Educational Perspective*, Prentice Hall, Englewood Cliffs, New Jersey, 1976.

Passow, A. Harry, *The Gifted and the Talented: Their Education and Development*, NSSE, 78th Yearbook, University of Chicago Press, 1979. Order from The National Society for the Study of Education, 5835 Kinbark Avenue, Chicago, Illinois 60637.

Renzulli, J., 1977, *The Enrichment Triad Model*, The Creative Learning Press, P.O. Box 320, Wethersfield, Connecticut 06250, 1977.

Seagoe, M.V., *Terman & the Gifted*, Wm. Kaufman, Los Altos, California, 1975.

Stanley, J.C. Keating, D.P. and Fox, Lynn, *Mathematical Talent: Discovery Description and Development*, The Johns Hopkins University Press, Baltimore 21218, 1978.

Torrance, E.P. and Myers, R.E., *Creative Learning and Teaching*, Dodd & Mead Co., 79 Madison Avenue, New York, New York 10016, 1970.

Tuttle, Frederick B., Jr., and Becker, L.A., *Program Design and Development for Gifted and Talented Students*, National Education Association, 1201 16th Street, Washington, D.C. 20036, 1980.

Ward, Virgil S., *Educating the Gifted: An Axiomatic Approach*, Charles E. Merrill, Columbus. Ohio 43213, 1961.

Programs and Materials for the Gifted

Advanced Placement Programs, c/o College Board, 500 Davis St., Evanston, Illinois 60201.

Astor Program, c/o Virginia Ehrlich, 490 Hudson St., New York, New York 10014

Bronx High School of Science, c/o Vincent Galazzo, 75 West 205th St., Bronx, New York 10468.

CEMREL Math Program, CEMREL Labs, St. Louis, Missouri.

Classroom Ideas: Encouraging Thinking and Feeling in the Classroom, Frank Williams, DOK Publisher, 771 East Delavan Ave., Buffalo, New York 14215.

The Enrichment Triad, Joseph Renzulli, Creative Learning Press, Wethersfield, Connecticut.

Junior Great Books, Junior Great Books Foundation, 400 Michigan Avenue, Chicago, Illinois

Leadership and the Law, c/o Marcia LeBeau, Chelmsford H.S., Chelmsford, Massachusetts.

Philosophy in the Classroom: A Guide for Teachers, Institute for the Advancement of Philosophy for Children, Montclair State College, Upper Montclair, New Jersey.

Student Readings: *Harry Stottlemeir's Discover—Lisa—Suki*

The Purdue Creative Thinking Program, and *The Purdue Independent Study Program*, John Feldhusen, Ed., Psychology, Purdue University, West Lafayette, Indiana 47907.

SMPY, William George, Johns Hopkins University, Baltimore, Maryland.

SOI Learning Materials, SOI Institute, 214 Main Street, El Segundo, California 90245.

Appendix A

Suggestions for Possible Identification Procedures in Each Talent Area

Intellectual
- Teacher Recommendations
- Intelligence Test Scores
- Cumulative Records
- Achievement Test Scores
- Parent Inventory
- Student Interest Inventory

Academic
- Teacher Recommendations
- Cumulative Records
- Achievement Test Scores
- Parent Inventory
- Student Interest Inventory
- Special Achievements in Academic Areas
- Worksheet on Specific Academic Areas
- Intelligence Test Scores

Leadership
- Teacher Recommendations
- Sociometric Tests
- Cumulative Records
- Parent Inventory
- Student Interest Inventory
- Anecdotal Reports
- Situational Tasks

Creative Thinking
- Short Form of Torrance's Creativity Test
- Teacher Recommendations
- Cumulative Records
- Parent Inventory
- Student Interest Inventory
- Situational Tasks

Visual and Performing Arts
- Teacher Recommendations—classroom and special teacher
- Parent Inventory
- Student Interests and Value Inventory
- Peer Identification
- Sample of Student's Work
- Situational Tasks

Psychomotor
- Teacher Recommendations—classroom and special teacher
- Peer Identification
- Parent Inventory
- Task Performance
- Situational Tasks
- Checklist

Appendix B

Other Methods of Gathering Data on Students

1) Cumulative Records
2) Student Interest Inventory
3) Special Achievements in Academic Area
4) Worksheet on Specific Academic Areas
5) Sociometric Tests
6) Anecdotal Reports
7) Autobiography
8) Extra-curricular Activities
9) Personal History Questionnaire
10) Biography of an Ideal (selected by the person)
11) Autobiography of the future
12) Themes on personal life, goals, and ambitions
13) Diary of personal life, goals, and ambitions
14) Daily log or journal of things done by the student
15) Role playing and sociodrama
16) Interview
17) Counseling
18) Home Visit
19) Individual Rating Sheets
20) Case Conference
21) Academic Record
22) Work Record
23) Health Record
24) Activity Report
25) Reports from other professional people
26) Tests of Cultural Differences
    a. Abbreviated Binet for the Disadvantaged (ABDA) developed by Dr. Catherine Bruch and Dr. E. Paul Torrance, University of Georgia, Athens, Georgia.
    b. Biographical Inventory (secondary level) developed by Institute of Behavioral Research in Creativity, Salt Lake City, Utah.
27) Affective Tests for Measuring Feeling (Character, Personality, and Self-Concept)
    a. Early School Personality Questionnaire (grades 1-3)
    b. Children's Personality Questionnaire (grades 3-6)
    c. Junior-Senior High Personality Questionnaire (grades 6-12)
    d. California Test of Personality (grades K-12)
    e. Piers-Harris Self Observation Scale
    f. "How Do You Really Feel About Yourself" Inventory (grades 4-12)
    g. Tennessee Self-Concept Scale (grades 5-12)
    h. Self Concept as a Learner—Elementary Scale (grades 3-12)
       Secondary Scale (grades 7-12)
    i. California Test of Psychology (grades K-12)
    j. Barron-Welsh Art Scale of the Welsh Figure Preference Test (grades 1-12)
    k. Personality Rating Scale (grades K-12)
    l. Preschool Academic Sentiment Scale (grades K-1)

About the Author

Joyce Van Tassel-Baska is currently the director of a regional gifted center that provides program development assistance to over 95 school districts in Illinois. She was formerly the state director of gifted programs for Illinois, coordinator of gifted programs for the Toledo, Ohio school system, and a teacher of gifted high school students in English and Latin. She has worked as a consultant on gifted education in over 30 states and for key national groups, including the U.S. Department of Education, The Leadership Training Institute, National Association of Independent Schools, and American Association of School Administrators. She currently serves on editorial board for *The Journal for the Education of the Gifted* and *Roeper Review*, and is past president of The Association for the Gifted of the Council for Exceptional Children. She has taught courses in gifted education at seven major universities and written numerous articles in the field.

Other Publications on the Education of Gifted and Talented Education

By:
The National Association of State Boards of Education

An Advocate's Guide To Building Support For Gifted And Talented Education

Edited By Patricia Bruce Mitchell

This guide to selling gifted programs to legislatures, board members and administrators presents critical information on what works and what does not work during all phases of advocacy. Articles explain how to organize parent groups, how to lead them through the steps of preparing for and conducting an advocacy effort, and how to give testimony at legislative or school board meetings. $7.50 per copy prepaid.

A Policymaker's Guide To Issues In Gifted And Talented Education

Edited By Patricia Bruce Mitchell

This unique publication outlines four basic steps for developing policies for gifted and talented educational programs; issues to be considered; and decisions to be made in laying the framework for gifted programs. Current policies and programs in other states are presented in an overview article and through a series of detailed profiles on six states. $7.50 per copy prepaid.

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